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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kaushik Barde

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/010,507

Applicant(s)

BARDE ET AL.

Examiner

Kristie Shingles

Art Unit

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-- The MAILING DATE of this communication app ars on th cov r sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 1301.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-17 are pending.

Claim Objections

1. Claim 10 is objected to because of the following informalities: typographic error— sentence should begin with capital letter “A...” Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by *Scharber* (USPN 6,542,964).

a. Per claim 1, *Scharber* teaches a server load reduction system including a master URL containing data comprising:

- a proxy server comprising a proxy server cache and a distribution mechanism, said proxy server adapted to receive the data from the master URL, said proxy

server comprising logic operative to record the data in a proxy server cache, said proxy server further comprising a distribution mechanism for distributing the data to a client server (**Abstract, Col.1 Line 31-Col.2 Line 64 and Col.8 Lines 8-65; the cache or proxy server comprises a distribution mechanism for passing data to other servers in a round-robin scheme, a cache server is receptive to URL requests and then attempts to retrieve the requested information and add it to its cache**); and

- a proxy browser adapted to conduct a browse operation to request the data contained in the master URL, said browse operation conducted through said proxy server, said proxy browser containing logic operative to notify said client server to load the data when said proxy server contains all of the data (**Col.4 Lines 28-56, Col.6 Line 10-Col.8 Line 65 and Col.10 Lines 5-61; cache servers may access data for the requested URL upon conduction of a browse/query operation that sends a response indicating that it contains all of the data and thus provides it according to the request**).

b. Per claim 2, *Scharber* teaches the server load reduction system according to claim 1 wherein said client server is associated with a group of user terminals such that said group of user terminals download said data (**Figures 1-4 and Col.7 Line 3-Col.8 Line 33; the cache servers are associated with client machines via communication links for data transmission**).

c. Per claim 4, *Scharber* teaches the server load reduction system according to claim 1 wherein said proxy server further comprises a multicast proxy server (**Figure 3, Col.7 Line 3-Col.9 Line 30 and Col.9 Line 58-Col.10 Line 61; the ICDS may be resident on a cache server or proxy server that performs multicasting by directing requests and content to the select cache server based on the determined caching protocol**).

d. Per claim 5, *Scharber* teaches the server load reduction system according to claim 1 wherein the data is transferred to said client from said proxy server through a SERGE transport system (**Col.2 Line 54-Col.3 Line 15, Col.5 Line 53-Col.6 Line 32 and Col.7 Line 8-**

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Col.9 Line 57; a reliable multicasting system is realized through the implementation of content distribution based on protocol, thus cache servers are associated with transmitting resources specifically to clients requiring a particular protocol).

e. **Per claim 6, *Scharber* teaches the server load reduction system according to claim 1 wherein said proxy server further comprises logic operative to signal said proxy server to update said proxy server cache when the data is modified (Col.10 Lines 5-33; provision for frequent updates to cache data).**

4. Claims 7-17 are rejected under 35 U.S.C. 102(e) as being anticipated by *Swildens et al* (USPN 6,754,699).

a. **Per claim 11, *Swildens et al* teach a method for reduction of server load comprising:**

- **conducting a browse operation with a proxy browser to find a master URL (Col.2 Lines 20-25, Col.8 Lines 10-14 and Col.13 Line 12-Col.15 Line 20; provision for browsing applications for URL requests);**
- **requesting a unicast portion of data contained in said master URL for use by a first client (Col.7 Lines 40-49; client makes unicast request for data from the URL in the cache server);**
- **receiving said unicast portion of said data in a proxy server (Col.12 Lines 9-31; cache server receives URL request from client);**
- **storing said unicast portion of said data in said proxy server (Col.7 Lines 54-57, Col.12 Lines 9-31 and Col.24 Lines 48-55; cache server logs and stores data from the client's URL request);**
- **notifying a first client server when said proxy server contains all of said unicast portion of said data (Col.7 Lines 50-57, Col.12 Lines 9-16, Col.13 Lines 6-59 and Col.15 Lines 9-18; clients are notified and provided with data once the cache server retrieves and contains the requested data, during performance testing clients are notified once the servers have downloaded all of the data);**

- requesting a multicast portion of said data contained in said master URL for use by said first client (**Col.7 Lines 50-57 and Col.13 Lines 50-58; cache server requested multicasted data from the origin site for the client**);
- receiving said multicast portion of said data in said proxy server (**Col.7 Lines 50-57, Col.11 Lines 24-29 and Col.12 Lines 9-16; cache server receives multicast data**); and
- notifying a second client server when said proxy server contains all of said multicast portion of said data (**Col.7 Lines 54-57, Col.12 Lines 9-42 and Col.15 Lines 14-18; subsequent clients are notified and provided with multicasted data once the cache server retrieves and stores the requested data, during performance testing clients are notified once the select servers have downloaded all of the data**).

b. **Claims 7-9** contain limitations that are substantially similar to claim 11 and are therefore rejected under the same basis.

c. **Per claim 10, *Swildens et al* teach the method according to claim 7 further comprising the step of updating said proxy server to contain substantially current master URL data (Col.3 Lines 7-12 and Col.26 Lines 57-61; cache is updated with refreshed data from the origin customer server site).**

d. **Claim 17** is substantially equivalent to claim 10 and is therefore rejected under the same basis.

e. **Per claim 12, *Swildens et al* teach the method according to claim 11 wherein requesting said unicast portion of said data contained in said master URL further comprises requesting said unicast portion of said data contained in said master URL for use by a second client (Col.7 Line 55-Col.9 Line 65; data is requested per the URL input command from the client, data is thus retrieved for and transmitted to each client requesting data, when the cache server does not have local access to the data then it requests it from the origin site**

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and stores it for subsequent clients, so the data will be accessible and provided from the cache when they request it—thus unicasted directly from the cache server to the client).

f. Per claim 13, *Swildens et al* teach the method according to claim 12 wherein requesting said multicast portion of said data contained in said master URL further comprises requesting said multicast portion of said data contained in said master URL for use by said second client (Col.12 Lines 9-40 and Col.26 Line37-Col.27 Line 65; refreshed data is multicast to clients requesting the data as well as cache updates and data retrieved by the cache server on behalf of the clients to the origin sites).

g. Per claim 14, *Swildens et al* teach the method according to claim 11 further comprising downloading said multicast portion of said data to said first client server (Col.15 Lines 9-46 and Col.19 Lines 9-19; during performance testing select multicasted servers download the particular webpage and all of its components for display to specified clients).

h. Claim 16 is substantially similar to claim 14 and is therefore rejected under the same basis.

i. Per claim 15, *Swildens et al* teach the method according to claim 11 wherein notifying said first client server when said proxy server contains all of said unicast portion of said data further comprises notifying said second client server when said proxy server contains all of said unicast portion of said data (Col.18 Line 60-Col.19 Line 65; specified clients are notified of the downloaded performance results when the server has downloaded all of the data from unicast communication between the server).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Scharber* (USPN 6,542,964) in view of *Brendel et al* (USPN 5,774,660).

a. **Per claim 3, *Sharber*** teaches the system of claim 2 as applied above, yet fails to explicitly teach the server load reduction system according to claim 2 wherein at least two members of said group of user terminals operate different web browser programs. However, *Brendel et al* disclose use of different browsers accessed by the client users in the load-balancing distributed resource multi-node network (**Col.2 Lines 9-67**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Sharber* and *Brendel et al* for the purpose of extending the compatibility of the system to support various types of web browsers; because it would accommodate client users operating different types of browser programs.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- a. *Bayeh et al* (USPN 6,098,093) disclose maintaining sessions in a clustered server environment.
- b. *Chlan et al* (USPN 6,385,642) disclose an internet web server cache storage and session management system.
- c. *Devine et al* (USPN 6,606,708) disclose a secure server architecture for web based data management.
- d. *Burns et al* (USPN 5,991,306) disclose pull-based, intelligent caching system and method for delivering data over a network.
- e. *Yu* (USPN 6,351,775) discloses load balancing across servers in a computer network.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


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SUPERVISORY PATENT EXAMINER